38 Special

Smith & Wesson introduced the 38 Special in 1902 as a ballistic improvement over the 38 Long Colt cartridge. Much of its acceptance was due not to increased power but to its excellent accuracy. Originally loaded with black powder, the cartridge gracefully made the transition to smokeless as the new propellants became available.

The original cartridge fired a 158-grain lead round nose bullet at about 800 ft/sec, a load spec that remains with us today. Wadcutter bullets were also loaded to cut clean, full-caliber holes in paper targets. Other than a handful of specialty loads for law enforcement, these two bullets were the only choices in factory ammunition until the late 1960's when expanding jacketed bullets were first introduced.

During the 1930's, demand for better 38 Special performance led to the introduction of heavy-frame revolvers designed to handle higher pressures and ammunition driving 158-grain bullets at velocities up to 1000 ft/sec. Thus, two 38 Special pressure levels existed in the industry for years but there was little uniformity in case markings. You couldn't always tell a high-pressure load simply by looking at the cartridge.

This confusion was finally eliminated in 1974 when the industry adopted the +P headstamp designator to identify cartridges loaded to the higher pressure limit. As all U.S. ammo makers and most foreign ones agreed to use this system, the shooter could read the headstamp and tell if the pressure level was suitable for his revolver. Because there are differences in the reloading of 38 Special and 38 Special +P cartridges, we have listed data for this cartridge in separate sections. The section on +P loads immediately follows this one.

Reloaders must remember that the 38 Special case is much bigger than necessary for most modern propellants. A maximum-pressure charge of some propellants takes up very little room in the case. Air space is high, especially when loading standard (not +P) loads. You must keep this in mind to avoid accidental double charges.

Lead bullets are best for loading standard pressure 38 Specials. They are easily propelled through the barrel by modest powder charges. Jacketed bullets create more resistance than lead bullets and may lodge in the bore if propellant charges are too light or too slow-burning. This condition is aggravated in revolvers with large chamber throats or excessive barrel/cylinder gaps. To avoid these problems, we are showing jacketed bullet data for only 110 and 125-grain bullets. Heavier bullets may not attain suffi-

cient velocity to reliably overcome both friction and the gap. Note that these loads are marked "DNR," meaning "do not reduce." Reductions of loads below the levels shown can result in a bullet-in-bore condition in revolvers with excessive barrel/cylinder gaps. These jacketed bullet loads must never be used in rifles.

The industry specification for barrel-cylinder gap is 0.001 to 0.012-inch in newly manufactured revolvers. Gaps no larger than 0.008-inch give better ballistic performance. Excessive gaps can result in a dangerous bullet-in-bore condition.

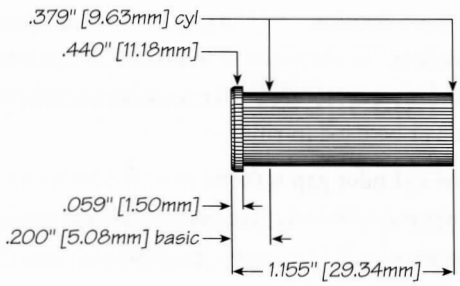
The new 110-grain Gold Dot Short Barrel bullet is the best expanding bullet for standard pressure loadings. Its deep and spacious hollow point cavity allows expansion at low velocities common to standard pressure loads in compact revolvers. We show velocities from both the standard 6-inch revolver as well as from a 2-inch barrel.

We developed loads for Cowboy Action shooting using bullets cast from the RCBS 9mm-147-FN mould. Although intended for the 9mm Luger, this bullet can be sized to .358" to make excellent 38 Special CAS loads. We roll-crimped into the front lube groove.

Wadcutters are popular for target shooting and are also very effective small-game bullets if the ranges do not exceed 50 yards. At greater distances, semi-wadcutters are better due to their superior downrange stability. The Speer hollow-base wadcutter (HBWC) is seated flush with the case mouth; use a light roll or taper crimp to support low-pressure ignition. Wadcutter bullet loads are not necessarily at maximum pressure but are at velocity levels that give good accuracy in target handguns. To avoid bullet base deformation, do not exceed these loads when using HBWC bullets.

We show 38 Special loads for Speer shot capsules in this data set. Please read the text at the beginning of the Handgun data section for additional information on these specialty projectiles.

The industry pressure limit for the 38 Special is 17,000 psi.



Max. Case Length:	1.155"	**Cart. Case:**	Speer
Trim-to Length:	1.145"	**Primer:**	CCI 500; 550
Max Cart. OAL:	1.550"	**Test Firearm:**	S&W Model 14
RCBS Shell Holder:	#6	**Barrel Length:**	6"

0.358"	38 HBWC
Weight, grains	148
Ballistic Coefficient	0.050
Sectional Density	0.165
COAL Tested:	See note
Speer Part No.	4617

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Red Dot	2.7	754	**3.0**	806
231	3.0	749	**3.3**	804
HP-38	2.9	752	**3.2**	801
Bullseye	2.8	741	**3.1**	799
700-X	2.6	739	**2.9**	791
AA No. 2 Impr.	2.7	690	**3.1**	789

NOTE: *Seat bullet flush with case mouth. Use a light roll or taper crimp.*

0.358"	9mm-147 FN
Weight, grains	147
Lead Alloy	hard
Ballistic Coefficient	0.151
Sectional Density	0.167
COAL Tested:	1.530"
RCBS Mould No.	82077

Cowboy ACTION SHOOTING DATA

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
700-X	3.2	780	**3.8**	893
AA No. 2 Impr.	3.5	803	**4.0**	871
HP-38	3.6	768	**4.0**	852
H. Universal	4.0	765	**4.4**	846
PB	3.7	761	**4.2**	840
Bullseye	3.1	768	**3.5**	838
WSF	3.8	753	**4.2**	836
Unique	4.0	741	**4.6**	820
Red Dot	3.0	716	**3.4**	794

NOTE: *We sell bullet moulds, not cast bullets. These bullets were cast in RCBS moulds. Contact your dealer for more information on the RCBS line of premium bullet casting equipment, or visit on the Internet at www.rcbs.com.*

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.358"	38 LSWC	38 LSWC HP	38 LRN
Weight, grains	158	158	158
Ballistic Coefficient	0.123	0.121	0.170
Sectional Density	0.176	0.176	0.176
COAL Tested:	1.440"	1.455"	1.510"
Speer Part No.	4623	4627	4647

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
SR 4756	5.0	844	**5.6**	967
Power Pistol	4.8	856	**5.4**	948
AA No. 5	5.8	874	**6.2**	922
H. Universal	4.2	827	**4.6**	902
700-X	3.2	774	**3.8**	877
231	3.8	783	**4.3**	863
PB	3.7	770	**4.2**	858
HP-38	3.6	756	**4.1**	855
WSF	3.8	738	**4.3**	830
Viht. N350	4.5	717	**5.0**	818
Unique	4.0	740	**4.7**	815
Bullseye	3.1	752	**3.5**	814
Red Dot	3.0	727	**3.4**	793
AA No. 2	3.6	708	**4.0**	781

0.358"	38 UCHP	38 GDHP SB
Weight, grains	110	110
Ballistic Coefficient	0.113	0.117
Sectional Density	0.123	0.123
COAL Tested:	1.455"	1.455"
Speer Part No.	4007	4009

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Power Pistol	6.2	1006	**6.6**	1074
Viht. 3N37	6.5	990	**6.9**	1071
Unique	5.4	947	**5.8**	1065
AA No. 5	6.8	979	**7.2**	1043
TiteGroup	4.1	890	**4.5**	1002
H. Universal	5.1	829	**5.5**	998
700-X	4.2	907	**4.6**	997
Bullseye	4.2	891	**4.6**	990
231	4.6	871	**5.0**	971
American Select	DNR	—	**4.3**	887

DNR — do not reduce

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.357"	38 UCHP	38 GDHP SB
Weight, grains	110	110
Ballistic Coefficient	0.113	0.117
Sectional Density	0.123	0.123
COAL Tested:	1.455"	1.455"
Speer Part No.	4007	4009

SHORT BARREL VELOCITIES

Test Firearm: S&W M15 2"

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Unique	5.4	806	**5.8**	936
AA No. 5	6.8	860	**7.2**	900
Viht. 3N37	6.5	845	**6.9**	895
H. Universal	5.1	760	**5.5**	882
Power Pistol	6.2	823	**6.6**	880
700-X	4.2	784	**4.6**	879
Bullseye	4.2	791	**4.6**	852
TiteGroup	4.1	782	**4.5**	850
231	4.6	817	**5.0**	848
American Select	DNR	—	**4.3**	784

DNR — do not reduce

0.357"	38 UCSP	38 GDHP	38 UCHP	38 TMJ FN
Weight, grains	125	125	125	125
Ballistic Coefficient	0.129	0.140	0.129	0.146
Sectional Density	0.140	0.140	0.140	0.140
COAL Tested:	1.435"	1.440"	1.435"	1.435"
Speer Part No.	4011	4012	4013	4015

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Viht. 3N37	DNR	—	**6.8**	1037
AA No. 5	DNR	—	**7.1**	1011
AA No. 2 Impr.	DNR	—	**5.4**	994
Power Pistol	DNR	—	**6.1**	986
Unique	DNR	—	**5.7**	980
H. Universal	DNR	—	**5.5**	966
WSF	DNR	—	**5.3**	934
TiteGroup	DNR	—	**4.4**	933
PB	DNR	—	**4.9**	927
Bullseye	DNR	—	**4.5**	914
700-X	DNR	—	**4.6**	905
American Select	DNR	—	**4.1**	839

DNR — do not reduce

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.358"	38/357 Shot Capsule
Weight, grains	109
Ballistic Coefficient	n/a
Sectional Density	n/a
COAL Tested:	1.500"
Speer Part No.	8780

Propellant	Weight, grs	Muzzle Velocity, ft/sec
Unique	5.5	1111
700-X	4.5	1060
HP-38	4.5	1054
Bullseye	4.5	1021
231	5.0	996

NOTE: *Shot capsules must not be used in firearms with ported recoil compensators.*

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

38 Special +P

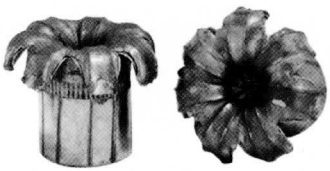
Intended only for firearms approved by their manufacturer for +P ammunition. See the previous section for 38 Special loads at standard pressures.

In the 1930's, the performance of the standard 38 Special was enhanced by the addition of loads at higher operating pressures. When first conceived, these loads were intended for firing only in heavy Colt and Smith & Wesson revolvers built on 44 Special frames. Cases were sometimes headstamped "38 HV," "38 HS" or "38/44" to indicate the higher pressure but many of these loads could be identified only if you had the original box or a catalog number.

For consistency in identifying higher-pressure ammo, the firearms industry adopted the +P headstamp in 1974. By agreement, gun makers would determine which of their firearms were suitable for +P ammunition and make that information available to their customers. The three cartridges to which this identifier was first applied were the 38 Super Auto, the 257 Roberts and the 38 Special. The current pressure limit for 38 Special +P ammunition is 20,000 psi compared to 17,000 psi for the standard 38 Special. This allows a bit more flexibility for the handloader using jacketed bullets. When loading Speer jacketed bullets, you must not use charge weights lighter than the starting loads shown here.

At +P velocities, you will obtain the best combination of expansion and penetration with Speer's new 135-grain Gold Dot Short Barrel hollow point. It features a deep, large-volume cavity and will expand reliably in revolver barrels as short as two inches. The 110-grain Gold Dot Short Barrel bullet shares the same cavity and allows much higher velocity at the expense of some penetration. The 125-grain hollow point bullets give less expansion but offer deep penetration. We show velocities for the two Short Barrel bullets both in our standard 6-inch revolver and a 2-inch revolver.

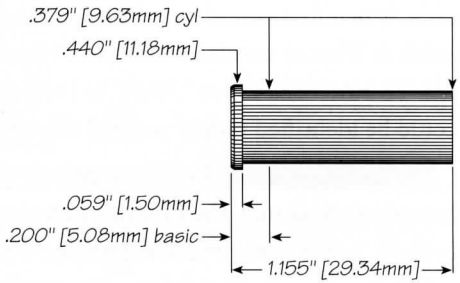
Powders having a moderate burning rate such as Power Pistol and Unique usually give the best performance in the 38 +P. Jacketed bullets heavier than 146 grains yielded very low velocities under current pressure standards and we no longer recommend them in the 38 Special. To fill this weight slot we have developed +P loads for the 158-grain Speer lead bullets.



38 Spl +P 135-gr Gold Dot® Short Barrel bullet fired into ordnance gelatin from a 2-inch revolver (vel. 861 ft/sec)

The new high-tech lube works fine at these speeds. Many researchers still think the 158-grain lead hollow point beats any jacketed 38 Special load for expansion and penetration. The Gold Dot Short Barrel bullets may force them to change their opinions.

Some revolvers are not rated for 38 Special +P ammunition. Contact your firearm's manufacturer—not the ammo makers—and follow their recommendation on the use of this ammunition. Firearms not approved for +P ammunition may show accelerated wear if subjected to continuous firing with +P ammo.



Max. Case Length:	1.155"	**Cart. Case:**	Speer
Trim-to Length:	1.145"	**Primer:**	CCI 500; 550*
Max Cart. OAL:	1.550"	**Test Firearm:**	S&W Model 14
RCBS Shell Holder:	#6	**Barrel Length:**	6"

0.358"	38 LSWC	38 LSWC HP	38 LRN
Weight, grains	158	158	158
Ballistic Coefficient	0.123	0.121	0.170
Sectional Density	0.176	0.176	0.176
COAL Tested:	1.440"	1.455"	1.510"
Speer Part No.	4623	4627	4647

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Power Pistol	5.4	948	**6.0**	1037
700-X	3.8	877	**4.4**	980
AA No. 5	6.2	922	**6.6**	978
HS-6	6.3	914	**6.7**	971
H. Universal	4.6	902	**5.0**	971
PB	4.2	858	**4.6**	962
231	4.3	863	**4.7**	935
Unique	4.7	815	**5.2**	919
HP-38	4.1	855	**4.5**	918
Viht. N350	5.0	818	**5.4**	901
WSF	4.3	830	**4.7**	892
Bullseye	3.5	814	**3.9**	874
Red Dot	3.4	793	**3.8**	846
AA No. 2 Impr.	4.0	781	**4.3**	843

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.357"	38 UCHP	38 GDHP SB
Weight, grains	110	110
Ballistic Coefficient	0.113	0.117
Sectional Density	0.123	0.123
COAL Tested:	1.455"	1.455"
Speer Part No.	4007	4009

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Power Pistol	7.0	1123	**7.4**	1192
Viht. 3N37	6.9	1071	**7.3**	1150
AA No. 5	7.5	1099	**7.9**	1143
Unique	5.9	1090	**6.3**	1117
H. Universal	5.7	1028	**6.1**	1100
Bullseye	4.8	1027	**5.2**	1098
700-X	4.7	1017	**5.1**	1085
TiteGroup	4.7	1013	**5.1**	1082
231	5.2	1008	**5.6**	1059
American Select	4.4	894	**4.8**	967

0.357"	38 UCHP	38 GDHP SB
Weight, grains	110	110
Ballistic Coefficient	0.113	0.117
Sectional Density	0.123	0.123
COAL Tested:	1.455"	1.455"
Speer Part No.	4007	4009

SHORT BARREL VELOCITIES

Test Firearm: S&W M15 2"

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Unique	5.9	929	**6.3**	976
H. Universal	5.7	895	**6.1**	976
AA No. 5	7.5	915	**7.9**	969
Power Pistol	7.0	911	**7.4**	967
Viht. 3N37	6.9	903	**7.3**	958
700-X	4.7	878	**5.1**	954
TiteGroup	4.7	875	**5.1**	945
231	5.2	884	**5.6**	944
Bullseye	4.8	873	**5.2**	941
American Select	DNR	—	**4.8**	879

DNR — do not reduce

*Maximum Loads should be used with CAUTION • C = Compressed Load • * Magnum Primer used with this powder.*




0.357"	38 UCSP	38 GDHP	38 UCHP	38 TMJ FN
Weight, grains	125	125	125	125
Ballistic Coefficient	0.129	0.140	0.129	0.146
Sectional Density	0.140	0.140	0.140	0.140
COAL Tested:	1.435"	1.440"	1.455"	1.435"
Speer Part No.	4011	4012	4013	4015

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Viht. 3N37	6.8	1037	**7.2**	1098
Unique	5.7	980	**6.0**	1082
Power Pistol	6.1	986	**6.8**	1082
H. Universal	5.6	976	**5.9**	1058
AA No. 5	7.5	927	**7.8**	1030
Bullseye	4.5	914	**4.8**	1021
PB	4.9	927	**5.4**	1021
WSF	5.3	934	**5.8**	1021
AA No. 2 Impr.	5.4	994	**5.7**	1014
700-X	4.6	/ 905	**4.9**	1013
TiteGroup	4.4	933	**4.9**	1012
American Select	DNR	—	**4.7**	931

DNR — do not reduce

0.357"	38 GDHP SB
Weight, grains	135
Ballistic Coefficient	0.141
Sectional Density	0.151
COAL Tested:	1.450"
Speer Part No.	4014

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Power Pistol	6.0	983	**6.4**	1065
AA No. 5	6.6	1000	**7.0**	1052
AA No. 7	7.8	964	**8.2**	1030
HS-6	6.8	944	**7.2**	1027
Viht. 3N37	6.0	969	**6.4**	1007
Unique	4.8	867	**5.2**	988
H. Universal	5.0	937	**5.2**	977
PB	DNR	—	**4.7**	936

DNR — do not reduce

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.357"	38 GDHP SB
Weight, grains	135
Ballistic Coefficient	0.141
Sectional Density	0.151
COAL Tested:	1.450"
Speer Part No.	4014

SHORT BARREL VELOCITIES

Test Firearm: S&W M15 2"

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
AA No. 7	7.8	838	**8.2**	882
AA No. 5	6.6	819	**7.0**	878
HS-6	6.8	780	**7.2**	856
Power Pistol	6.0	797	**6.4**	845
Unique	4.8	768	**5.2**	834
H. Universal	5.0	785	**5.2**	825
Viht. 3N37	6.0	760	**6.4**	823
PB	DNR	—	**4.7**	788

DNR — do not reduce

0.357"	38 UCHP
Weight, grains	140
Ballistic Coefficient	0.145
Sectional Density	0.157
COAL Tested:	1.435"
Speer Part No.	4203

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
Blue Dot	7.1	1024	**7.4**	1053
AA No. 5	6.8	955	**7.1**	1002
Viht. N350	5.9	924	**6.2**	982
Power Pistol	5.3	872	**6.0**	976
WSF	5.3	930	**5.5**	974
H. Universal	5.0	935	**5.3**	969
Unique	5.0	902	**5.3**	960
HS-6	6.4	873	**7.0**	960
SR 4756	5.4	860	**5.9**	933
231	4.8	870	**5.1**	931
Bullseye	4.0	828	**4.6**	924
TiteGroup	3.7	819	**4.2**	883

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*

0.357"	38 JHP-SWC
Weight, grains	146
Ballistic Coefficient	0.159
Sectional Density	0.164
COAL Tested:	1.370"
Speer Part No.	4205

	START CHARGE		MAXIMUM CHARGE	
Propellant	Weight, grs	Muzzle Velocity, ft/sec	Weight, grs	Muzzle Velocity, ft/sec
AA No. 7	7.8	937	**8.2**	1004
Blue Dot	6.7	971	**7.1**	1000
Unique	4.8	905	**5.1**	957
2400	8.3	836	**9.0**	952
H. Universal	4.6	894	**5.0**	940
Power Pistol	4.9	832	**5.5**	935
Viht. N350	5.2	840	**5.6**	903

*Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.*