



# Ballistics

## Rifle Ammunition Product Lines:

**AG** American Gunner™  
**C** Custom™  
**CI** Custom™ International

**CL** Custom Lite®  
**DG** Dangerous Game™ Series  
**FB** Full Boar™

**LEV** LEVERevolution®  
**M** Match™  
**PH** Precision Hunter™

**S** Steel Match®  
**SF** Superformance®

**SI** Superformance® International  
**SM** Superformance® Match

**SV** Superformance® Varmint  
**T** TAP® FPD™  
**V** Varmint Express®

**VM** Vintage Match™

## Hornady® Bullet Types:

**A-MAX®**  
**BT . . . .** Boattail  
**BTHP . .** Boattail Hollow Point  
**DGS® . .** Dangerous Game Solid

**DGX® . .** Dangerous Game™ eXpanding  
**ELD-X™** Extremely Low Drag - eXpanding  
**ELD™ Match**  
**FMJ . . .** Full Metal Jacket

**FP . . . .** Flat Point  
**FPB® . .** Flex Tip® Projectile Blackpowder  
**FTX® . .** Flex Tip® eXpanding

**GMX® . .** Copper Alloy eXpanding  
**HP . . . .** Hollow Point  
**InterBond®**  
**L . . . . .** Swaged Lead Bullet

**LRN . . .** Lead Round Nose  
**ML . . . .** Muzzleloading  
**MonoFlex®**  
**NTX® . .** Non-Traditional eXpanding  
**OTM . . .** Open-Tip Match

**RN . . . .** Round Nose  
**SIL . . . .** Silhouette  
**SJ . . . .** Short Jacket  
**SP . . . .** Spire Point  
**SP-RP . .** Spire Point Recoil Proof

**SST® . . .** Super Shock Tip  
**V . . . . .** Vented  
**V-MAX®**  
**XTP® . . .** eXtreme Terminal Performance™

## Rifle Ballistics

Ammo Description		Velocity (m/sec)										Energy (joules)						Trajectory Tables (cm)						GEE	GEE Trajectory								
CARTRIDGE	BULLET	ITEM #	B.C.	MUZ	50m	100m	150m	200m	250m	300m	MUZ	50m	100m	150m	200m	250m	300m	MUZ	50m	100m	150m	200m	250m	300m		MUZ	50m	100m	150m	200m	250m	300m	
V	17 Mach 2	15.5 gr. NTX®	(1.0g) 83176	.115	625	517	420	333	256	189	—	196	134	89	56	33	18	—	-5.0	2.2	0	-16.3	-55.0	-131.2	—	121	-5.0	4.2	4.0	-10.3	-47.0	-121.2	—
V	17 Mach 2	17 gr. V-MAX®	(1.1g) 83177	.125	640	539	447	364	289	223	—	226	160	110	73	46	27	—	-5.0	1.8	0	-14.2	-47.0	-109.3	—	124	-5.0	3.8	4.0	-8.2	-39.0	-99.3	—
V	17 HMR	15.5 gr. NTX®	(1.0g) 83171	.115	770	649	538	438	348	268	199	297	211	145	96	61	36	20	-5.0	0.5	0	-9.0	-31.0	-73.3	-149.3	136	-5.0	2.5	4.0	-3.0	-23.0	-63.3	-137.3
V	17 HMR	17 gr. V-MAX®	(1.1g) 83170	.125	777	665	561	466	380	303	235	333	244	174	120	80	51	30	-5.0	0.3	0	-8.2	-27.7	-64.2	-127.2	139	-5.0	2.3	4.0	-2.2	-19.7	-54.2	-115.2
V	17 HMR	20 gr. XTP®	(1.3g) 83172	.125	724	616	517	426	344	271	207	340	246	173	118	77	48	28	-5.0	0.8	0	-10.1	-33.7	-78.1	-155.4	133	-5.0	2.8	4.0	-4.1	-25.7	-68.1	-143.4
V	17 WSM	20 gr. V-MAX®	(1.3g) 83180	.185	914	830	750	674	602	534	470	542	447	365	294	235	185	143	-5.0	-0.7	0	-3.7	-12.7	-28.6	-53.1	172	-5.0	1.3	4.0	2.3	-4.7	-18.6	-41.1
SV	17 Hornet	15.5 gr. NTX®	(1.0g) 83004	.114	1177	1021	877	744	621	510	410	695	524	386	278	194	131	84	-5.0	-1.3	0	-1.9	-8.3	-21.0	-43.1	198	-5.0	0.7	4.0	4.1	-0.3	-11.0	-31.1
SV	17 Hornet	20 gr. V-MAX®	(1.3g) 83005	.185	1113	1019	929	843	761	684	611	802	672	559	460	376	303	242	-5.0	-1.3	0	-1.5	-6.5	-15.8	-30.3	213	-5.0	0.7	4.0	4.5	1.5	-5.8	-18.3
C	17 Hornet	25 gr. HP	(1.6g) 83006	.187	1189	1085	989	900	817	739	665	1145	953	793	657	541	442	358	-5.0	-1.4	0	-1.2	-5.6	-13.9	-27.3	232	-5.0	0.5	4.0	5.0	3.1	-2.5	-12.4
SV	204 Ruger	24 gr. NTX®	(1.6g) 83209	.170	1341	1228	1119	1016	918	824	736	1399	1172	974	803	655	528	421	-5.0	-1.7	0	-0.3	-2.9	-8.5	-17.7	263	-5.0	0.3	4.0	5.7	5.1	1.5	-5.7
SV	204 Ruger	32 gr. V-MAX®	(2.1g) 83204	.210	1288	1198	1111	1027	947	870	796	1720	1487	1280	1094	930	785	657	-5.0	-1.6	0	-0.3	-3.0	-8.4	-17.1	264	-5.0	0.4	4.0	5.7	5.0	1.6	-5.1
SV	204 Ruger	40 gr. V-MAX®	(2.6g) 83206	.275	1189	1123	1058	996	936	877	821	1832	1634	1452	1286	1135	997	873	-5.0	-1.5	0	-0.7	-3.8	-9.7	-18.9	252	-5.0	0.5	4.0	5.3	4.2	0.3	-6.9
C	204 Ruger	45 gr. SP	(2.9g) 83208	.245	1105	1034	965	899	835	773	714	1780	1558	1358	1178	1016	871	743	-5.0	-1.4	0	-1.3	-5.6	-13.5	-25.4	224	-5.0	0.6	4.0	4.7	2.4	-3.5	-13.4
V	5.45 x 39mm	60 gr. V-MAX® (Steel Case)	(3.9g) 8124	.285	856	803	752	702	654	608	563	1426	1255	1099	958	832	718	616	-5.0	-0.6	0	-3.7	-12.5	-26.9	-48.1	172	-5.0	1.4	4.0	2.3	-4.5	-16.9	-36.1
V	22 WMR	25 gr. NTX®	(1.6g) 83201	.085	671	522	391	280	187	—	—	364	220	124	63	28	—	—	-5.0	2.1	0	-18.6	-69.3	—	—	120	-5.0	4.1	4.0	-12.6	-61.3	—	—
V	22 WMR	30 gr. V-MAX®	(1.9g) 83202	.095	671	536	417	313	224	—	—	437	280	169	95	49	—	—	-5.0	1.9	0	-16.3	-58.0	—	—	122	-5.0	3.9	4.0	-10.3	-50.0	—	—
V	22 Hornet	35 gr. V-MAX®	(2.3g) 8302	.109	936	793	663	544	437	341	258	993	714	498	335	216	—	—	-5.0	-0.5	0	-5.1	-18.6	-45.0	-92.2	156	-5.0	1.5	4.0	0.9	-10.6	-35.0	-80.2
C	22 Hornet	45 gr. SP	(2.9g) 83028	.202	808	736	667	602	540	481	426	951	789	648	528	424	337	264	-5.0	-0.2	0	-5.3	-17.4	-38.0	-69.1	155	-5.0	1.8	4.0	0.7	-9.3	-27.9	-57.0
SV	222 Rem	35 gr. NTX®	(2.3g) 8309	.177	1146	1046	951	860	774	692	615	1490	1241	1026	839	680	544	429	-5.0	-1.4	0	-1.3	-6.0	-14.8	-28.7	219	-5.0	0.6	4.0	4.7	2.0	-4.8	-16.7
SV	222 Rem	50 gr. V-MAX®	(3.2g) 8316	.242	1020	951	884	820	759	700	643	1684	1465	1267	1090	933	793	669	-5.0	-1.1	0	-2.0	-7.7	-17.6	-32.5	203	-5.0	0.9	4.0	4.0	0.3	-7.6	-20.5
SV	223 Rem	35 gr. NTX®	(2.3g) 83266	.177	1219	1116	1017	923	833	748	668	1686	1412	1173	966	788	635	506	-5.0	-1.5	0	-0.9	-4.6	-11.9	-23.6	236	-5.0	0.5	4.0	5.1	3.4	-1.9	-11.6
V	223 Rem	40 gr. V-MAX®	(2.6g) 8325	.200	1158	1069	984	902	823	748	677	1739	1482	1254	1054	879	726	594	-5.0	-1.4	0	-1.1	-5.3	-13.0	-25.2	228	-5.0	0.6	4.0	4.9	2.7	-3.0	-13.2
FB	223 Rem	50 gr. GMX®	(3.2g) 83291	.215	1017	939	865	794	726	661	599	1674	1430	1213	1022	854	708	582	-5.0	-1.1	0	-2.2	-8.2	-19.0	-35.3	198	-5.0	0.9	4.0	3.8	-0.2	-9.0	-23.3
SV	223 Rem	53 gr. V-MAX®	(3.4g) 8025	.290	1056	997	940	885	831	779	729	1916	1708	1519	1345	1187	1043	913	-5.0	-1.3	0	-1.5	-6.2	-14.4	-26.6	218	-5.0	0.7	4.0	4.5	1.8	-4.4	-14.6
V	223 Rem	55 gr. V-MAX®	(3.6g) 8327	.255	988	923	861	801	744	688	635	1738	1519	1322	1145	986	844	718	-5.0	-1.1	0	-2.3	-8.3	-18.8	-34.5	197	-5.0	0.9	4.0	3.7	-0.3	-8.8	-22.5
AG	223 Rem	55 gr. HP	(3.6g) 80237	.223	988	913	842	775	711	650	592	1740	1485	1264	1070	900	752	624	-5.0	-1.0	0	-2.6	-9.5	-21.4	-39.9	193	-5.0	1.0	4.0	3.6	-0.9	-10.3	-25.4
S	223 Rem	55 gr. HP (Steel Case)	(3.6g) 80274	.254	988	922	859	799	742	687	634	1740	1514	1315	1138	980	840	716	-5.0	-1.0	0	-2.4	-8.9	-19.9	-36.7	197	-5.0	0.9	4.0	3.7	-0.3	-8.9	-22.6
C	223 Rem	68 gr. BTHP	(4.4g) 80289	.355	902	858	815	773	733	693	654	1794	1623	1464	1318	1182	1058	943	-5.0	-0.8	0	-2.9	-9.8	-21.4	-38.0	186	-5.0	1.2	4.0	3.1	-1.8	-11.4	-26.0
M	223 Rem	75 gr. BTHP	(4.9g) 8026	.395	850	812	775	738	702	667	633	1757	1602	1458	1323	1198	1082	975	-5.0	-0.6	0	-3.5	-11.4	-24.3	-42.8	176	-5.0	1.4	4.0	2.5	-3.4	-14.3	-30.8

All data from a 24" Bbl, unless otherwise noted.











# Handgun Ammunition Product Lines:

**AG** American Gunner™

**CD** Critical Defense®

**CDL** Critical Defense® Lite

**DUTY** Critical Duty®

**C** Custom™

**LEV** LEVERevolution®

## Handgun Ballistics

Ammo Description				Velocity (m/sec)			Energy (joules)			
CARTRIDGE	BULLET	ITEM #	BARREL LENGTH	MUZ	50m	100m	MUZ	50m	100m	
CD	22 WMR	45 gr. FTX® (2.9g)	83200	1 7/8 V"	305	280	261	136	115	99
C	25 Auto	35 gr. XTP® (2.3g)	90012	2"	274	248	226	85	69	58
C	32 Auto	60 gr. XTP® (3.9g)	90062	4"	305	276	254	180	148	125
CD	32 NAA	80 gr. FTX® (5.2g)	90070	4"	305	284	268	241	210	186
CD	32 H&R	80gr. FTX® (5.2g)	90060	4"	351	317	294	319	260	224
AG	380 Auto	90 gr. XTP® (5.8g)	90102	4"	305	278	258	271	225	194
C	380 Auto	90 gr. XTP® (5.8g)	90104	4"	305	278	258	271	225	194
CD	380 Auto	90 gr. FTX® (5.8g)	90080	4"	305	278	258	271	225	194
CDL	9mm Luger	100 gr. FTX® CD Lite (6.5g)	90240	4"	343	306	281	381	304	256
AG	9mm Luger	115 gr. XTP® (7.5g)	90244	4"	352	316	292	462	373	317
CD	9mm Luger	115 gr. FTX® (7.5g)	90250	4"	346	312	289	446	363	312
AG	9mm Luger +P	124 gr. XTP® (8.0g)	90224	4"	338	313	294	460	393	348
C	9mm Luger	124 gr. XTP® (8.0g)	90242	4"	338	313	294	460	393	348
DUTY	9mm Luger	135 gr. FlexLock (8.7g)	90236	4"	308	293	280	415	374	343
DUTY	9mm Luger +P	135 gr. FlexLock (8.7g)	90226	4"	338	316	300	500	438	392
C	9mm Luger	147 gr. XTP® (9.5g)	90282	4"	297	285	274	420	386	358
C	357 Sig	147 gr. XTP® (9.5g)	9131	4"	373	345	323	664	567	498
DUTY	357 Sig	135 gr. FlexLock (8.7g)	91296	4"	373	339	314	610	503	433
CDL	38 Special	90 gr. FTX® CD Lite (5.8g)	90300	4"	366	316	286	390	292	239
CD	38 Special	110 gr. FTX® (7.1g)	90310	4" V	308	286	269	338	292	258
CD	38 Special+P	110 gr. FTX® (7.1g)	90311	4" V	332	304	283	393	328	285
AG	38 Special	125 gr. XTP® (8.1g)	90324	4" V	274	261	249	305	275	251
C	38 Special	158 gr. XTP® (10.2g)	90362	4" V	244	236	229	305	285	268
CD	357 Magnum	125 gr. FTX® (8.1g)	90500	8" V	457	400	354	846	648	510
AG	357 Magnum	125 gr. XTP® (8.1g)	90504	8" V	457	400	355	846	649	511
DUTY	357 Magnum	135 gr. FlexLock (8.7g)	90511	8" V	389	351	322	660	537	456
LEV	357 Magnum	140 gr. FTX® (9.1g)	92755	8" V	439	390	352	875	691	561
C	357 Magnum	158 gr. XTP® (10.2g)	90562	8" V	381	350	327	743	628	546
CD	9 x 18mm Makarov	95 gr. FTX® (6.2g)	91000	4"	305	278	258	286	239	205
AG	40 S&W	155 gr. XTP® (10.0g)	91364	4"	360	323	298	649	525	446
C	40 S&W	155 gr. XTP® (10.0g)	9132	4"	360	323	298	649	525	446

Ammo Description				Velocity (m/sec)			Energy (joules)			
CARTRIDGE	BULLET	ITEM #	BARREL LENGTH	MUZ	50m	100m	MUZ	50m	100m	
CD	40 S&W	165 gr. FTX® (10.7g)	91340	3"	319	296	279	542	468	415
DUTY	40 S&W	175 gr. FlexLock (11.3g)	91376	4"	308	289	274	537	475	426
C	40 S&W	180 gr. XTP® (11.7g)	9136	4"	290	275	262	489	441	403
C	10mm Auto	155 gr. XTP® (10.0g)	9122	5"	386	341	310	747	583	484
DUTY	10mm Auto	175 gr. FlexLock (11.3g)	91256	5"	354	321	298	711	584	503
C	10mm Auto	180 gr. XTP® (11.7g)	9126	5"	360	328	305	754	628	545
C	44-40 Cowboy	205 gr. Cowboy (13.3g)	9075	7½" V	221	210	200	324	293	264
CD	44 Special	165 gr. FTX® (10.7g)	90700	2½" V	274	258	244	403	357	319
C	44 Special	180 gr. XTP® (11.7g)	9070	7½" V	305	285	269	542	473	420
C	44 Rem Mag	200 gr. XTP® (13.0g)	9080	7½" V	457	406	364	1354	1068	858
LEV	44 Rem Mag	225 gr. FTX® (14.6g)	92782	7½" V	430	376	336	1346	1030	823
C	44 Rem Mag	240 gr. XTP® (15.6g)	9085	7½" V	411	375	345	1316	1093	927
C	44 Rem Mag	300 gr. XTP® (19.4g)	9088	7½" V	351	330	314	1194	1059	957
AG	45 Auto	185 gr. XTP® (12.0g)	90904	5"	296	278	263	523	462	414
CD	45 Auto	185 gr. FTX® (12.0g)	90900	3"	274	260	247	451	405	366
C	45 Auto	200 gr. XTP® (13.0g)	9112	5"	274	261	249	488	441	401
DUTY	45 Auto +P	220 gr. FlexLock (14.3g)	90926	5"	297	283	270	629	569	521
C	45 Auto +P	200 gr. XTP® (13.0g)	9113	5"	322	299	282	670	579	514
C	45 Auto +P	230 gr. XTP® (14.9g)	9096	5"	290	277	265	625	571	526
C	45 Auto	230 gr. FMJ-RN (14.9g)	9097	5"	259	250	241	500	464	433
CD	45 Colt	185 gr. FTX® (12.0g)	92790	3" V	280	265	252	472	422	380
C	45 Colt	255 gr. Cowboy (16.5g)	9115	4¾" V	221	209	198	404	362	325
LEV	45 Colt	225 gr. FTX® (14.6g)	92792	4¾" V	293	275	261	624	552	496
C	454 Casull	240 gr. XTP® Mag (15.6g)	9148	7½" V	579	511	450	2609	2034	1578
C	454 Casull	300 gr. XTP® Mag (19.4g)	9150	7½" V	503	449	402	2458	1962	1570
C	460 S&W	200 gr. FTX® (13.0g)	9152	8 3/8"	671	592	519	2914	2268	1746
C	475 Linebaugh	400 gr. XTP® Mag (25.9g)	9140	7½"	396	358	330	2035	1666	1411
C	480 Ruger	325 gr. XTP® Mag (21.1g)	9138	7½"	411	363	328	1783	1388	1135
C	50 AE	300 gr. XTP® (19.4g)	9245	6"	450	381	333	1965	1414	1078
C	500 S&W	300 gr. FTX® (19.4g)	9249	8½"	594	504	426	3434	2466	1760
C	500 S&W	500 gr. FP-XTP® (32.4g)	9252	8½"	396	359	331	2544	2089	1773